

Full Cost Decision Memorandum: Investment Account (OT-01)

Issue:

How does the Center handle strategic investment activities?

Source / reference:

LaRC Office of the Chief Financial Officer (OCFO)

Background:

NASA Centers have used a variety of funding mechanisms to address strategic investments. During the 1990's, NASA LaRC integrated two key investment elements into Center financial processes: Reserves and Creativity & Innovation (C&I) investments. NASA LaRC integrated reserves to address unplanned matters that occurred during the operating year. NASA LaRC also integrated key long-term research investments through a Creativity and Innovation (C&I) activity. (NASA LaRC, as well as other NASA Centers, also made certain other long-term investments through the Center Directors Discretionary Fund (CDDF). The CDDF activity was eliminated in 2004.)

During the early 2000's, NASA and NASA LaRC established full cost practices. These practices included a focus on linking all Center labor with specific NASA projects. This linkage also focused on ensuring that all labor activities would be funded through NASA projects. If certain labor capabilities are not fully funded through specific projects in all budget planning years, Centers may fund such labor through the G&A Investment Account. The related Investment Account component is referred to as the Transition Workforce.

The Investment Account is established during each annual budget planning cycle. The Account size is determined based on a number of qualitative and quantitative variables, including anticipated Center financial risks and challenges. The Account size is targeted at approximately 3% to 5% of the Center's annual business base. For example, with a \$600 million business base, the Investment Account would range from \$18 million to \$30 million. Basically, the Center estimates the size of required reserves, the size of the anticipated/required Transition Workforce and the appropriate (affordable) investments in IR&D, B&P, and Core Capability Development/ Process Improvement. The Investment Account is planned as an element of Center G&A and funded through assessments against Center projects.

Options/Discussion:

This paper highlights the purpose, components and characteristics of the NASA Langley Research Center (LaRC) Investment Account, as well as, certain related background information. The Investment Account was established in 2003 to address critical strategic investments. The Account also integrates tactical and operational requirements such as Center Reserves. Such reserves are established for unplanned matters that occur during the operating year.

The Investment Account is a key element of the Center's General and Administrative (G&A) funds/activities. The targeted Account funding is expected to range from approximately 3% to 5% of the Center's annual financial activities (business base). The Account includes 5 basic components:

- (1) Reserves,
- (2) Transition Work Force,

- (3) Independent Research and Development (IR&D),
- (4) Bid & Proposal (B&P) and
- (5) Core Competency Development/Process Improvement.

The Center Director and senior Center leaders decide on the use of the Investment Account and the Account is administered by the Center Chief Financial Officer (CFO).

Decision/Approach:

The Investment Account is a critical component of a Center's strategic financial planning. Planning for the account occurs each year during the annual budget planning process. The required reserves are based on the anticipated financial variability of events that may occur during the future operating year. Such specific events are largely unknown during the budget planning time period (~2 years before actual events occur). As a consequence, based largely on the Center's history related to reserve requirements, the size of the reserves is typically estimated at ~1% - 2% of the Center's projected business base. (For example, with a business base of \$600 million, the targeted reserve level would be approximately \$6 million - \$12 million.)

The Center leadership also decides on the appropriate level of investments in IR&D, B&P and Core Competency Development/Process Improvement activities. The Transition Workforce funding requirement is typically derived as the budget process evolves based on the amount of business/work that the Center's customers/funders plan. As such customer/funder (and other reimbursable) requirements emerge, the Center evaluates related labor attrition and skill mix characteristics and estimates the number of additional or fewer workforce that will be required. If additional workforce is required, the Center can adjust hiring, partnering, contracting plans to accommodate such. If less workforce is required i.e. the Center has insufficient planned future funded work, the temporarily unassigned workforce is funded through the Transition Workforce component of the Investment Account.

The various requirements of the Investment Account internally compete for the total Investment Account funding. The design of the Investment Account anticipated internal trade offs among Investment Account components. The design also anticipated that Transition Workforce funding requirements might be larger in the out-years (budget year plus 1-4 years) because of long-term planning uncertainty and the related lack of programmatic specificity. The design anticipated that, in the near term operating year and planning budget year, the Transition Workforce requirements would typically be reduced to zero as the operating year approached.

In assessing inter-Investment Account funding priorities, Center management works to balance the requirements for reserves, transition workforce, IR&D, B&P and core capability/process improvement activities. The specific circumstances in each area and in other Center areas typically make such trade-offs extremely difficult. The following priority list from highest priority to lowest priority is often (but not always) used to guide key decisions on such matters:

- (1) Reserves,
- (2) Transition Work Force,
- (3) IR&D,
- (4) B&P and
- (5) Core Capability/Process Improvement.

Reserves

Investment Account Reserves are established to fund unplanned activities that occur during the operating year. Such activities are typically unknown at the time that the budget is being developed but subsequently emerge as the operating year approaches or as the operating year unfolds. Reserves have

been used to pay for unanticipated expenses, such as utility (electricity) rate increases and for emergency repairs to Center facilities.

Transition Work Force

This Transition Work Force component of the Investment Account was established to fund workforce that have not been assigned to other funded projects. The Investment Account planning horizon spans several years. Typically, Investment Account plans cover the next year, the budget year and the budget year plus the next 4 years. (For example, in 2004, the financial plans for the investment account would cover 2005 (the next year), 2006 (the budget year) being planned and 2007 thru 2010 (the next 4 years.) Because of the complications in estimating, at the project specific level, out-year plans (years beyond the budget year), the transition component of the Investment Account may often indicate more unassigned transition labor in the out-years. As the operating year approaches, transition labor typically becomes smaller as project plans become refined and as staff are aligned with specific projects.

Independent R&D

The Independent Research & Development (IR&D) component of the Investment Account is focused on critical investments in long-term, innovative and emerging research, technology and scientific matters. The IR&D component includes the Center's Creativity & Innovation (C&I) activities, Jump Start activities, as well as, other related investment activities. Such activities also include a newly established Strategic Science Research (SSR) activity focused on the Center's scientific area.

The Independent Research & Development component of the Investment Account represents the Center's mid and long-term investments in new creative, innovative, scientific, research, technology and related matters. The Creativity and Innovation activities have been ongoing for several years and have included relatively modest investment activities in new research areas. The investments are determined through a competitive proposal process, whereby Center professionals propose new innovative, ideas, approaches, research and activities that are evaluated by senior experts and awarded based on their innovation and creativity. The Center's Jump Start activities are similar new innovative activities focused on initiating critical new research, scientific and technology areas. The recently initiated Strategic Scientific Research investment area focuses on new scientific research areas. Such investments are more directive than previously noted IR&D in that they will be decided by Center leadership based on the merits and linkage to long-term strategic scientific pursuits.

Bid & Proposal

The B&P component of the Investment Account provides funding for the Center's active pursuit of new business. Such investments often involve funding for Center near-term competitive proposal opportunities of NASA's (or other's) funder organizations in NASA Headquarters.

Core Capability/Process Improvement

The Core Capability/Process Improvement component of the Investment Account focuses on the development and maintenance of NASA Langley's long-term core capability including human capital, physical plant and related processes. Such funds are used to establish and maintain core capabilities or process improvements that will maintain the Center in good stead for future Agency and national aerospace missions.

Metrics

The Center targets Investment Account activities at 3% to 5% of the business base or with a business base of ~\$600 million, ~\$18 to \$30 million. While this amount will likely vary depending on the circumstances at the time, the Center typically attempts to balance the component activities in the account to maintain short-term requirements while maximizing long-term investments for the Center future prosperity. Typically, the Center plans the investment account as follows: ~20% - 40% of the activity for reserves, ~10% - 30% for transition workforce, ~20 - 40% for IR&D, ~5% - 20% for B&P and ~0% -

LaRC Full Cost Decision Memorandum

20% for core capability/process improvement. For example, in a year in which the Center is able to fund the Investment Account at \$30 million, the Center could plan on ~\$8 million for reserves, ~\$6 million for transition workforce, ~\$12 million for IR&D, ~\$2 million for B&P, and ~\$2 million for core competency/process improvement.

Approved by LaRC CFO (Ken Winter) 10/1/04